



A RARE CASE REPORT OF BILATERAL URETEROCELE IN MALE PATIENT WITH IMPACTION OF STONE IN RIGHT SIDED URETEROCELE.

General Surgery

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ABSTRACT

Bilateral ureterocele is a very rare condition and its presentation in a old male with impacted stone in it is rarest condition diagnosed in urology. The incidence of ureterocele is 1 in every 4000 livebirth and of all ureterocele 10% are Bilateral. It is 4 to 5 times common in females than males. We are reporting a case of a 60 year old male having bilateral ureterocele with a impacted stone in right ureterocele presenting the complain of urinary tract infection and pain in Bilateral flanks. His diagnosis is made by ultrasonography followed by IVP. Patient was managed surgically by deroofing and excision of the ureteroceles and by removing the stone.

KEYWORDS

Case Report

A 60 year old male presented to the emergency, Department of General Surgery, NMCH, Patna with severe right groin pain, burning micturation, nausea, for 24 hours duration. He has no history of any infective or systemic symptoms. He has no any history of stone disease, or any childhood developmental issues. On physical examination right groin tenderness with voluntary guarding was present but no rigidity. Urine examination showed microhematuria and proteinuria, and culture was negative for infection. His wbc counts was within normal limits, urea was 25 mg/dl and creatinine was 0.75 mg/dl. An ultrasonography of the renal system revealed a large stone of size 2cm obstructing at the vesicoureteral junction of left ureter. An IVP was performed to confirm the condition. Ivp showed the classical 'cobra head sign' which is the cystic dilatation of bilateral distal ureters.

Investigation On IVP-



Fig. 1- IVP showing classical 'cobra head sign'.

Remarks:- Bilateral ureterocele with calculus on the right without significant hydronephrosis. The kidneys show good function with early uptake and prompt excretion.

Fig 2- Remarks on the ivp report.

On USG-

IMPRESSION:- Right lower ureteric calculus at right VU junction.
- U.B shows two cystic like structure projecting into bladder near right and left vesicoureteric junction ---Ureterocele.

Fig 3- Remarks on usg.

Treatment

Urinary bladder was opened by giving a transverse incision. Bilateral ureter was identified and then it was secured by placing infant feeding tube of size 5 Fr in left side. Ureterocele in right side was excised and the stone was extracted causing relieve in obstruction and then by giving small incision on both ureteroceles, marsupialisation was done.

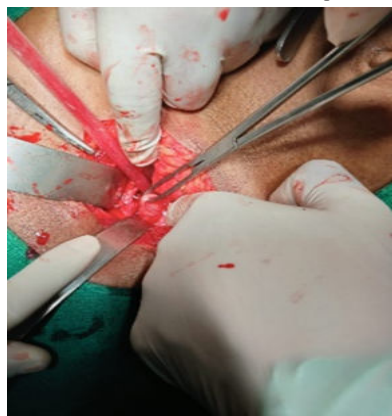


Fig 4 – Identification of ureterocele.

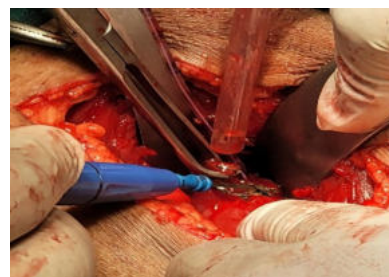


Fig 5 – deroofing of both ureteroceles.

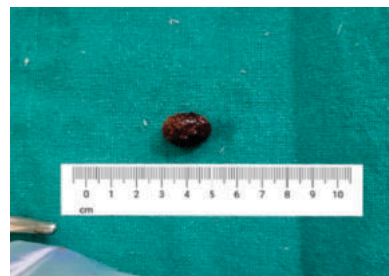


Fig 6 – Stone was extracted out.

DISCUSSION

A ureterocele is defined as a cystic dilatation of terminal ureter with associated tissue defect in the urinary bladder. It may be associated with variable degree bladder muscle defect and renal parenchymal abnormality. The incidence of ureterocele is estimated to be 1 in 4000 live births.¹

The commonly accepted theory behind ureterocele formation is the obstruction of ureteral orifice during embryogenesis, with incomplete dissolution of the Chwalla membrane.¹ Approximately 10% of ureteroceles are bilateral. They occur most frequently in females with a 4:1 ratio and in Caucasians.

Ureteroceles are divided into those that are completely inside the bladder, intravesical, or those that extend through the urethra or bladder neck, extravesical, and can also prolapse through the sphincter and cecoureterocele.² Many patients remain asymptomatic, however, some present with recurrent urinary tract infection and severe pyelonephritis, frequency, nocturia, and severe renal colic from an obstructed calculus within the ureterocele.⁴ Asymptomatic patients require no treatment, however, those who present with symptoms eventually benefit from surgical incision of the blind-ending pouch.

Incidence of stones within a ureterocele, according to the literature, is between 5% and 40%.³ Case reports and literature on this condition are rare and management varies between centers and geographical origins. A number of surgical techniques have been described in the literature. Open surgical approach are only used nowadays in resource limited centers. Endoscopic management of ureterocele has been gaining popularity. In current literature, transverse incisions of the ureterocele with monopolar diathermy have been described.³ Other cases have been described by utilizing shockwave lithotripsy initially, followed by transurethral ureterocele puncture.³ However, endoscopic puncture of the ureterocele has been illustrated to have high reoperation rates, ranging from 7% to 25%, many of which are performed as open surgery.³ Recently greenlight laser and holmium laser have been utilized for incisions of ureteroceles.

Here in this case, an open approach was done for the marsupialisation of the ureteroceles in the both side and impacted stone was removed. Ideally the endoscopic approach is used for its treatment but due to limited resource setting the same cannot be applied here. In this case the intraoperative and postoperative period was uneventful and patient was discharged on pod 8 after voiding post removal of urethral catheter.

CONCLUSION

Ureteroceles are very rare disorder of urogenital system causing the symptoms like burning micturation, pain abdomen. It is necessary to diagnose it as earliest as possible to avoid its complications like hydroureteronephrosis due to continuous ureteric reflux. Delay in its diagnosis in males are common taking into account its diagnostic pitfalls as the traditional IVPs are becoming less common these days and late presentation of patients to hospital. Thus, these rare ureteroceles must be diagnosed as earliest as possible.

REFERENCES:-

1. Giannakopoulos X, Chambilomatis R, Thirothoulakis M, Seferiadis G. The blind-ending bifid ureter. *Int Urol Nephrol* 1994;26:161–165 [PubMed] [Google Scholar]
2. Dominici A, Travaglini F, Maleci M, di Cello V, Rizzo M. Giant stone in a complete duplex ureter with ureterocele. *Urol Int* 2003;71:336–337 [PubMed] [Google Scholar]
3. Gotoh T, Arai H, Kimori K, Satoh E, Imazu T, Mishimura K, Hona M, Fujioka H. A case of urinary stone in ureterocele extracted transurethrally after ESWL. *Hinyokika Kyo* 2000;46:467–470 [PubMed] [Google Scholar]
4. Merlini E, Lelli Chiesa P. Obstructive ureterocele-an ongoing challenge. *World J Urol* 2004;22:107–114 [PubMed] [Google Scholar].